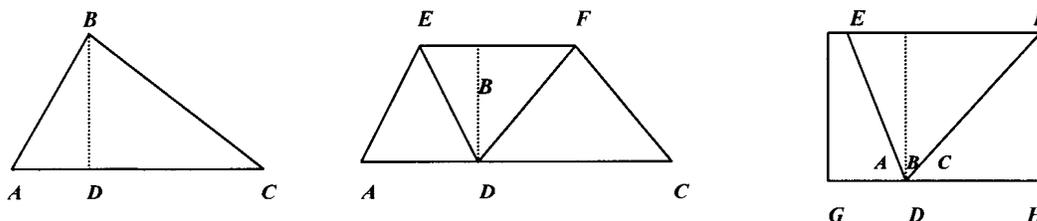


TRIANGLE FOLDING

Many geometric properties may be observed by folding a triangle. Begin with an acute scalene triangle. Fold the triangle as shown in the diagrams. What shape is formed? What is the area of the shape formed? How is the area of the shape formed related to the area of the original triangle?

Look for relationships between the original triangle; the folded shape; and the angles, A , B , and C .



YOU MAY NEED

- felt pen
- ruler
- scissors
- waxed paper

TO GET STARTED

- Cut out three congruent acute scalene triangles.
- Fold one of the triangles as shown in the diagrams.
- Open the folded shape and mark the fold lines.
- Repeat with the other two triangles. Each time start with a different altitude.

YOUR FINDINGS

Submit a written report that describes your explorations and observations. Include your folded and unfolded triangles. Be sure to answer the questions above. Give explanations for your observations.

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